#### Purple Loosestrife Control

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#### **Methods of Control**

#### **Chemical Methods**

- Spot Spraying
- Hand Wicking
- Boom Spraying
- Boom Wicking
- Burning

#### **Mechanical Methods**

Hand Pulling

**Biological Methods** 





### **Spot Spraying**

- Using a backpack sprayer with an adjustable nozzle allows for careful control when needed
- Can be used for small or large patches
- Apply chemical to as much of the leaf surface as possible, focusing on the top half of the plant
- Useful for targeting small populations, thus reducing off-target damage



## Hand Wicking

- Use backpack or hand sprayer
- Use chemical resistant gloves with jersey gloves over top or sponge application
- Can be used in areas where target plant is sparse and/or area is sensitive
- Apply chemical to as much of the leaf surface as possible





# **Boom Spraying**

- Use ATV or tractor with boom sprayer and tank
- Apply at recommended rates on chemical label for ground broadcast applications
- Dense areas will need higher spray volume
- Foliar application for large monocultures of short statured vegetation



#### **Boom Wicking**

- Use ATV or tractor with boom wicker and tank
- Absorbent cloth wrapped PVC pipe on front of vehicle
- Apply at recommended rates on chemical label for wicking applications
- Dense areas may require a double application in opposite directions
- Foliar application for large monocultures of tall growing vegetation



### **Burning**

- Used as a management tool to promote native species
- Used to promote plant growth in dense stands by reducing thatch and increasing sunlight penetration
- Most effective in combination with other control methods





## Hand Pulling

- Hand pulling is most effective when the ground is moist and most of the root is removed
- Hand pulling should be done just before or at flowering
- Most effective in small patches
- Useful in sensitive areas



### **Biological Control**

- Use when available resources are limited or when population is large monoculture
- Establishment of beetles takes 5-7 years but provides long-term control
- Follow recommended release and monitoring protocol from USDA APHIS





# Lake Station Mitigation Bank

- Example of integrated management control efforts
- Used boom spray application to exhaust seed bank prior to seeding and planting
- Once site was planted, used combination of spot application, select boom spray application and prescribed fire
- Biological control release ensures long-term control after active management efforts are complete and allows for management outside of site boundaries



## Other Examples

- Coffee Creek Watershed Preserve
  - Comprehensive management plan
  - Early detection
  - Outreach
- Schroedle property
  - Limited access, limited resources and loosestrife monoculture
  - Next step: site evaluation, partnerships/networking, funding potential, assessment of control techniques



#### **Practical Advice**

- Important to begin control efforts in early stages of infestation
- Inventory your properties
- Prioritize based on goals, ability to succeed, and resources
- Prepare a long-term prevention and management plan
  - Limit soil disturbance and manage aggressively afterwards
  - Conduct annual exotics survey in each portion of growing season